

N^o 27,598



A.D. 1903

Date of Application, 16th Dec., 1903—Accepted, 11th Feb., 1904

COMPLETE SPECIFICATION.

“Improved Apparatus to Provide for the Inhaling of Fresh Air in Vitiated Atmospheres”

I, EMIL WITZENMANN, Manufacturer, a subject of the Grand Duke of Hesse, residing at Pforzheim, Holzgartenstrasse 48, in the Grand Duchy of Hesse, Germany, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in
5 and by the following statement:—

The present invention relates to an apparatus whereby the inhaling of fresh air may be effected in spaces or apartments filled with dust, smoke or gases.

The essential feature of the invention consists in a mouth piece provided internally with two valves one of which allows for the inhaling of fresh air
10 which is supplied to the apparatus by means of a tube and the other for the exhaling of the vitiated air. The advantage of the arrangement of the valves directly placed inside the mouth piece (and therefore situated in close proximity to the mouth when using the apparatus) as compared with other devices of the kind, lies in the fact that practically no part of the air which has been once
15 used need be breathed over again. Moreover the improved device is particularly simple in construction.

In the accompanying drawings,

Fig: 1 shews the way in which the apparatus is used.

Fig: 2 is a side view of the mouthpiece and

20 Fig: 3 is a section thereof.

The apparatus consists of a T piece in which flap valves *a*, *b* (one of which *a* serves as the inlet for fresh air, and the other *b* as the outlet for the vitiated air) are placed, one of these valves *a* opening inwards and the other *b* outwards. In the construction illustrated the valve *a* is secured in the stem *d* of the T
25 piece and the valve *b* at the end *e* of the cross piece *c* by means of screw caps *f* and *g* provided with openings in the tops. The cap *f* is provided with a nozzle to receive a tube *h* which is in connection with the fresh air supply.

This special arrangement of flap valves renders it quite impossible to breath any of the vitiated air over again.

30 The person using this apparatus will employ as usual a nose clip or similar device so as to avoid breathing any of the injurious gases through the nose.

It will be obvious that the invention may be also employed for inhaling.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed I declare that what
35 I claim is:—

Apparatus for facilitating breathing in spaces filled with dust, smoke or gases consisting of a T shaped mouth piece provided in its interior with two valves *a* and *b* one of which serves to admit fresh air supplied by means of a tube and the other to carry off the vitiated air as shewn and described.

40 Dated this 16th day of December 1903,

NEWTON & SON
Agents for the Applicant



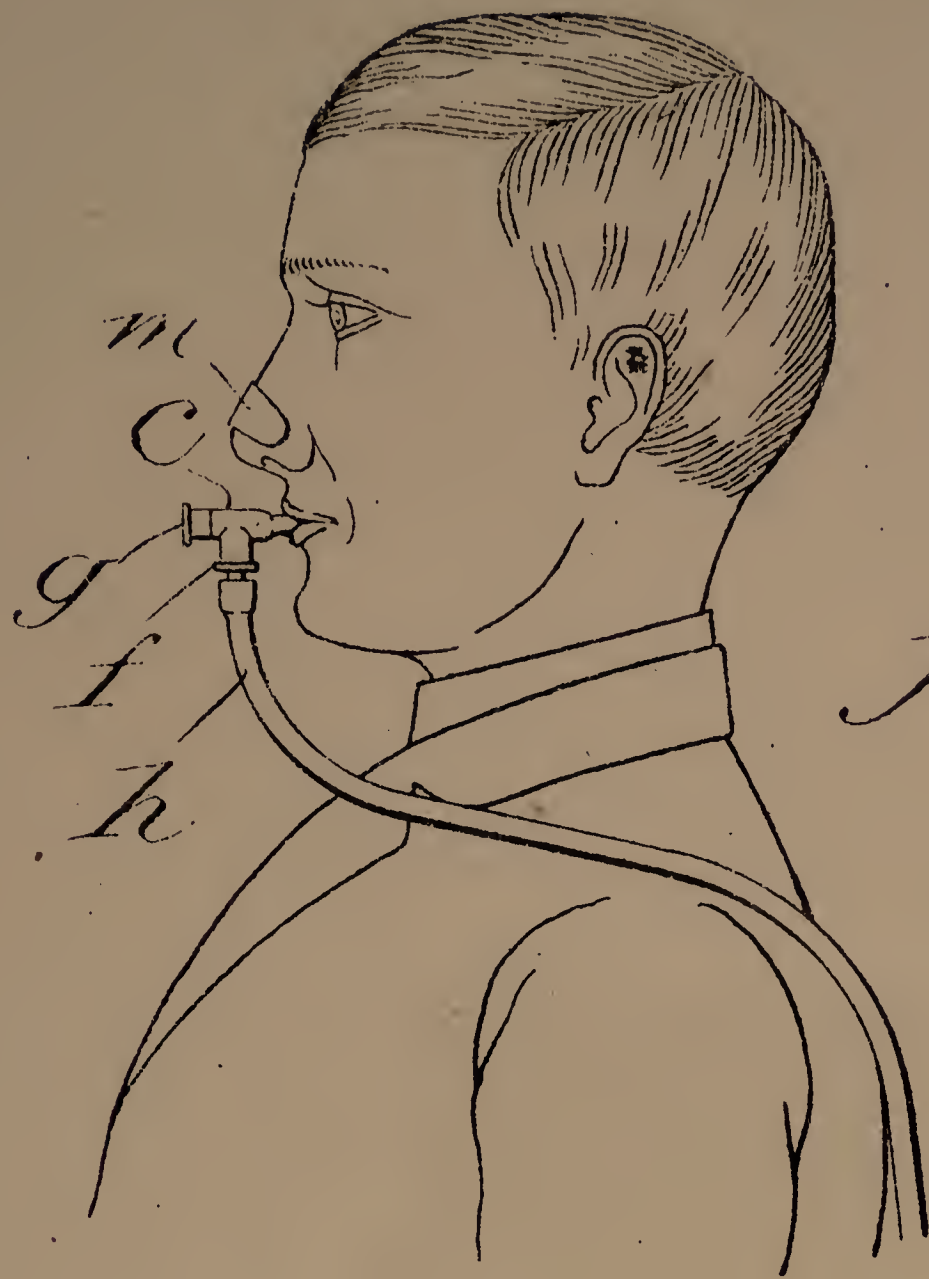


fig. 1.

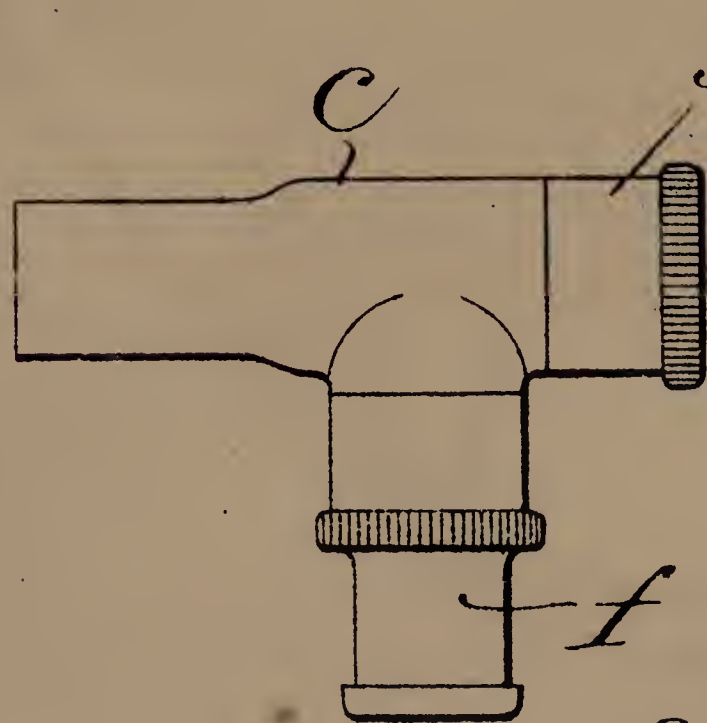


fig. 2.

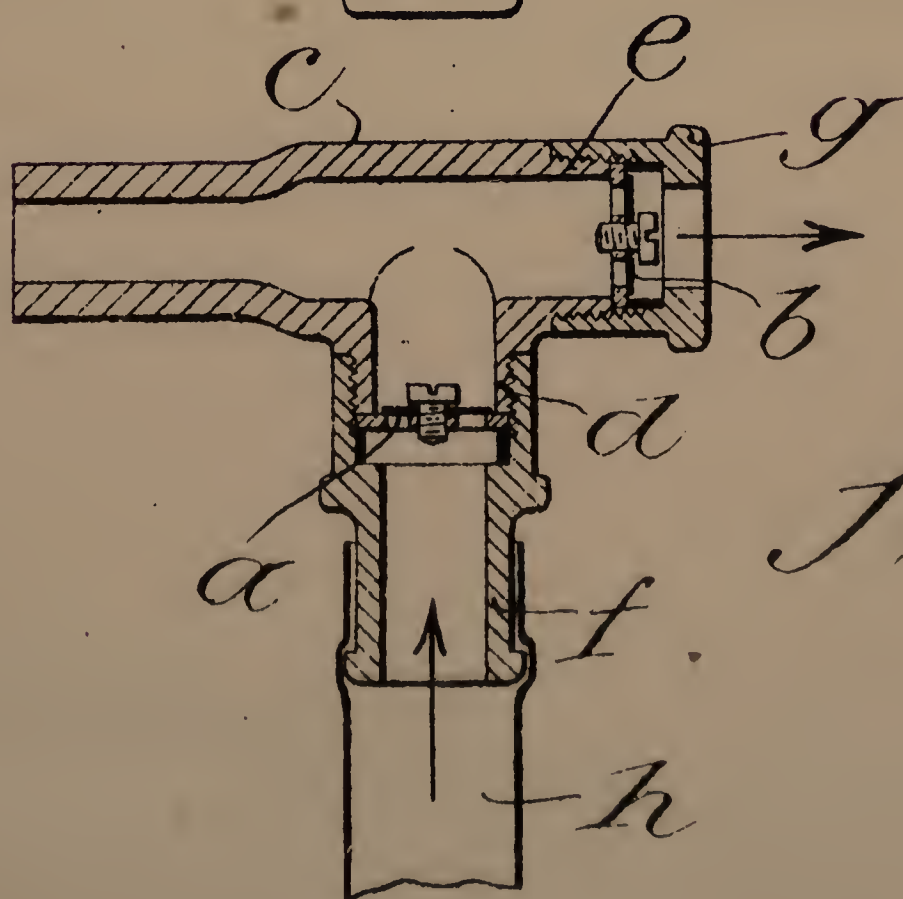


fig. 3.

[This Drawing is a reproduction of the Original on a reduced scale.]

